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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,332	03/10/2000	Akihiko Mochida	P/16-259	5458

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Ostrolenk Faber Gerb & Soffen LLP  
1180 Avenue of the Americas  
New York, NY 10036-8403

EXAMINER

WONG, ALLEN C

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/523,332

**Applicant(s)**

MOCHIDA ET AL.

**Examiner**

Allen Wong

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 9/29/03 have been fully read and considered but they are not persuasive.

Regarding lines 9-12 on page 4 of applicant's remarks, applicant contends that Kaiya does not disclose "a phase adjustment circuit for adjusting the phases of the timing signals so as to compensate a signal delay occurring over a signal transmission line to said imaging device which is linked and over which a signal is transmitted". The examiner respectfully disagrees. The independent claims are written in a manner that is broad enough to be interpreted as disclosed in Kaiya. As stated before, element 33a of Kaiya's fig.1 is a phase adjustment circuit that can adjust the phase to correspond to the signal delays that occur over the transmission line. And col.6, lines 38-52, Kaiya discloses that correct for possible anticipated delays that may transpire over the transmission line, the signal needs to correspond to the S2 signal and the adjustment of the phase of one of the timing signals has to be done for compensating the signal delay during signal transmission. Thus, Kaiya meets the broadly disclosed limitations of the claims.

Regarding lines 23-26 on page 5 of applicant's remarks, applicant asserts that Kaiya does not disclose the "phase adjustment circuit..." limitation and the double patenting rejection is not met nor deemed obvious. The examiner respectfully disagrees. The examiner has already replied to the "phase adjustment circuit..." limitation in the above paragraph. And as for the double patenting rejection, as stated

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before in the previous Office Action, the claim 1 limitations of Kaiya discloses similar limitations and wording to the applicant's independent claims 1, 18, 22 and 26. Kaiya discloses "first and second driving circuits... by applying respectively first and second driving signals to said first and second solid state imaging devices." Clearly, albeit not exact, both the applicant and Kaiya are disclosing similar limitations because the applicant's timing signal generation circuits and Kaiya's driving circuits serve the same purpose, to drive the imaging devices.

In addition, the applicant's independent claims 1, 18 and 22 disclose a "phase adjustment circuit for adjusting the phases of the timing signals", and applicant's claim 26 discloses "first and second phase adjustment circuits for adjusting the phases of the timing signals". Kaiya's claim 1 discloses "a synchronization controlling means synchronizing the illumination periods of the respective wavelengths". Evidently, one of ordinary skilled can clearly acknowledge that the Kaiya's "synchronizing the illumination periods" is basically the same as the applicant's "adjusting the phases of the timing signals" because they both compensate for signal delays.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kaiya (5,178,130).

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Regarding claim 1, Kaiya discloses an endoscopic imaging system comprising:  
an endoscope having an elongated insertion unit, the elongated insertion unit having an illumination optical system for illuminating an object and an objective optical system for illuminating an object and an objective optical system for introducing an optical image of the illuminated object (fig.1, element 2a);

an imaging apparatus having an imaging device for picking up the optical image and outputting a signal (fig.1, element 4a);

a video processing unit to which said imaging apparatus is removably connected so that it can be disconnected freely and which processes the signal to produce a standard video signal (fig.1, element 32a);

a display for displaying images of said object according to the standard video signal (fig.1, element 5a);

a timing signal generation circuit, incorporated in said imaging apparatus, for generating timing signals used to drive said imaging device (fig.4, element 33a is the same synchronization circuit as element 33a in fig.1, where element 78 is the timing signal generation circuit); and

a phase adjustment circuit for adjusting the phases of the timing signals so as to compensate a signal delay occurring over a signal transmission line to said imaging device which is linked and over which a signal is transmitted (fig.1, element 33a is a phase adjustment circuit; also see col.6, ln.38-52).

Note claims 2-17, 18-21 and 22-25 have similar corresponding elements.

Regarding claim 26, Kaiya discloses an endoscope system comprising:

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first and second endoscopes having an elongated insertion unit, each elongated insertion unit having an illumination optical system for illuminating an object and an objective optical system for introducing an optical image of the illuminated object (fig.1, elements 2a and 2b are respective endoscopes);

first and second imaging apparatuses having first and second imaging devices for picking up optical images produced by said first and second endoscopes, respectively, and outputting first and second signals, respectively (fig.1, elements 4a and 4b serve as respective imaging apparatuses);

a video processing unit to which said first and second imaging apparatuses are removably connected and which processes the first and second signals to produce a standard video signal (fig.1, elements 32a and 32b);

a display for displaying images of said object according to the standard video signal (fig.1, elements 5a and 5b);

first and second timing signal generation circuits, respectively incorporated in said first and second imaging apparatuses, for generating timing signals used to drive said imaging devices (fig.4, element 33a is the same synchronization circuit as element 33a in fig.1, where element 78 is the timing signal generation circuit, also note element 34 has a timing signal generation circuit); and

first and second phase adjustment circuits for adjusting the phases of the timing signals so as to compensate for signal delays occurring over first and second signal transmission lines to said first and second imaging devices which are linked and over

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which a signal is transmitted (fig.1, elements 33a and 34 are respective phase adjustment circuits; also see col.6, ln.38-52).

Note claims 27-29 have similar corresponding elements.

### ***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1, 18, 22 and 26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,178,130. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claim language in the application 09/523,332 is broader than claim 1 of the U.S. Patent No. 5,178,130.

Further, in the present application, the applicant's independent claims 1, 18, 22 disclose a "timing signal generation circuit... to drive said imaging device", and applicant's independent claim 26 discloses the "first and second timing signal generation circuits... to drive said imaging devices." In claim 1, Kaiya (US 5,178,130)

discloses a “first and second driving circuits... by applying respectively first and second driving signals to said first and second solid state imaging devices.” Clearly, albeit not exact, both the applicant and Kaiya are disclosing similar limitations because the applicant’s timing signal generation circuits and Kaiya’s driving circuits serve the same purpose, to drive the imaging devices.

Moreover, the applicant’s independent claims 1, 18 and 22 disclose a “phase adjustment circuit for adjusting the phases of the timing signals”, and applicant’s claim 26 discloses “first and second phase adjustment circuits for adjusting the phases of the timing signals”. Kaiya’s claim 1 discloses “a synchronization controlling means synchronizing the illumination periods of the respective wavelengths”. Evidently, one of ordinary skilled can clearly acknowledge that the Kaiya’s “synchronizing the illumination periods” is basically the same as the applicant’s “adjusting the phases of the timing signals” because they both compensate for signal delays.

### ***Conclusion***

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Allen Wong  
Examiner  
Art Unit 2613

AW  
12/15/03

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600